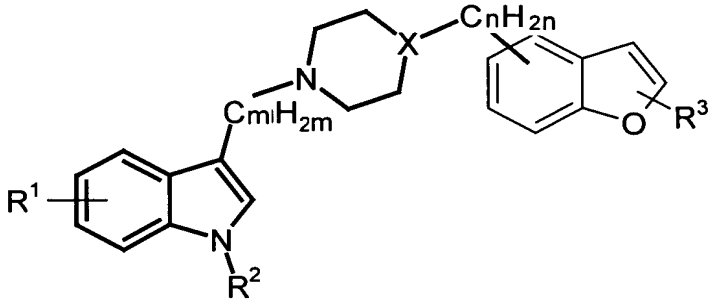
Claims

1. Compounds of the formula I



I

X = N or CH,

R^1, R^3 = independently of one another H, OH, OA, CN, Hal, COR^4 or CH_2R^4,

R^2 = H, an optionally mono- or poly-Hal-substituted, linear or branched alkyl having 1-6 C atoms, alkaryl, alkheteroaryl, or heteroaryl,

R^4 = OH, OA, NH_2, NHB or NB_2,

A, B = independently of one another alkyl having 1-6 C atoms,

m = 2, 3, 4, 5 or 6 and

n = 0, 1, 2, 3 or 4,

and physiologically acceptable salts, derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

2. Compounds according to Claim 1 in which

X = N,

R^1, R^3 = independently of one another CN, COR^4 or CH_2R^4,

R^2 = a linear or branched alkyl having 1-6 C atoms, alkaryl, alkheteroaryl, or heteroaryl,

R^4 = OH, NH_2, NHB or NB_2,

A, B = independently of one another alkyl having 1-6 C atoms,

m = 4 and

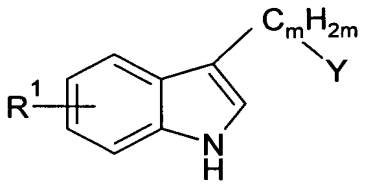
n = 0,

and physiologically acceptable salts, derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

3. Compounds according to Claim 1 or 2
   a. 5-{4-[4-(5-cyano-1-methyl-1H-indol-3-yl)butyl]piperazin-1-yl}benzofuran-2-carboxamide
   b. 5-{4-[4-(5-cyano-1-ethyl-1H-indol-3-yl)butyl]piperazin-1-yl}benzofuran-2-carboxamide
   c. 5-{4-[4-(5-cyano-1-isopropyl-1H-indol-3-yl)butyl]piperazin-1-yl}-benzofuran-2-carboxamide
   d. 5-{4-[4-(1-benzyl-5-cyano-1H-indol-3-yl)butyl]piperazin-1-yl}benzofuran-2-carboxamide
   e. 5-{4-[4-(5-cyano-1-propyl-1H-indol-3-yl)butyl]piperazin-1-yl}benzofuran-2-carboxamide
   f. 5-{4-[4-(5-cyano-1-pyridin-2-ylmethyl-1H-indol-3-yl)butyl]piperazin-1-yl}benzofuran-2-carboxamide
   g. 5-{4-[4-(5-cyano-1-phenethyl-1H-indol-3-yl)butyl]piperazin-1-yl}-benzofuran-2-carboxamide

4. Process for the preparation of the compounds of the formula I, characterised in that

   a) a compound of the formula II, in which R^1 and m have the meanings indicated in Claim 1 and Y is a halogen or is an alcohol provided with a protecting group known to the person skilled in the art,



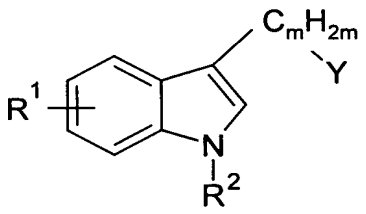
II

is reacted with a compound of the formula III, in which R^2 has the meanings indicated in Claim 1 and Z represents a leaving group known to the person skilled in the art, such as, for example, p-tosyl, trifluoromethanesulfonyl, methanesulfonyl, benzenesulfonyl, Br, Cl or I

$$R^2—Z \qquad \text{III}$$

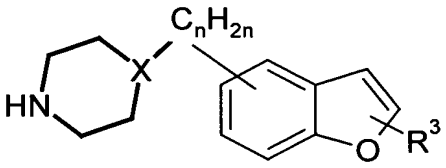
and

b) in that the compound of the formula IV



IV

obtained in accordance with a) is reacted with a compound of the formula V or a salt thereof, in which R^3, X and n have the meanings indicated in Claim 1,



V

in a solvent, optionally with addition of base, at the boiling point of the solvent,

or

c) in that the base of a compound of the formula I is converted into one of its salts by treatment with an acid.

5. Compounds according to one of Claims 1 to 3 and physiologically acceptable salts, derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios, as serotonin receptor ligands and/or for serotonin reuptake inhibition.

6. Pharmaceutical composition comprising at least one compound according to one of Claims 1 to 3 and/or physiologically acceptable salts, derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

7. Pharmaceutical composition, according to Claim 6 comprising further excipients and/or adjuvants.

8. Pharmaceutical composition comprising at least one compound according to one of Claims 1 to 3 and/or physiologically acceptable salts, derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios, and at least one further medicament active ingredient.

9. Process for the preparation of a pharmaceutical composition, characterised in that a compound according to one of Claims 1 to 3 and/or one of its physiologically acceptable salts, derivatives, solvates and stereoisomers, including mixtures thereof in all ratios, is brought into a suitable dosage form together with a solid, liquid or semi-liquid excipient or adjuvant.

10. Use of compounds according to one of Claims 1 to 3 and/or physiologically acceptable salts, derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios, for the preparation of a medicament for the treatment of diseases.

11. Use of compounds according to one of Claims 1 to 3 and/or physiologically acceptable salts, derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios, for the preparation of a medicament for the treatment of diseases associated with the serotonin receptor and/or serotonin reuptake.

12. Use of compounds according to one of Claims 1 to 3 and/or physiologically acceptable salts, derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios, for the preparation of a medicament as anxiolytic, antidepressant, neuroleptic and/or antihypertonic and/or for positively influencing obsessive-compulsive disorder (OCD), sleeping disorders, tardive dyskinesia, learning disorders, age-dependent memory disorders, eating disorders, such as bulimia or IBS, and/or sexual dysfunctions.

13. Use of compounds according to one of Claims 1 to 3 and/or physiologically acceptable salts, derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios, for the preparation of a medicament for the treatment of psychoses, schizophrenia, schizo-affective psychosis, cyclothymia, epilepsy, cramps, depression (sub-types of severe depression and cyclothymic depression), pathogenic anxiety states (sub-types of panic attacks with or without agoraphobia), superexcitation, hyperactivity, stress illnesses, post-traumatic stress disorders, sleeping disorders, narcolepsy, cyclic manic depression, attention disorders in children and youths, severe developmental disorders and disorders of social behaviour with mental retardation, obsessive-compulsive disorders in the narrower (OCD) and broader sense (OCSD), addiction disorders, disorders in nutrient uptake or eating disorders, for example bulimia, obesity or anorexia nervosa, in particular irritable bowel syndrome (IBS), fibromyalgia, and psychiatric symptoms in senile dementia and Alzheimer's-type dementia, cognitive impair-

ments (learning and memory disorders), in particular age-dependent memory disorders, dementia, tardive dyskinesia, neurodegenerative diseases, such as Parkinson's disease, Alzheimer's disease, Huntington's disease, lathyrism, amyotrophic lateral sclerosis, Lewy bodies dementia, Tourette's syndrome, sexual dysfunctions, premenstrual syndrome, acromegaly, hypogonadism, secondary amenorrhoea, undesired puerperal lactation, extrapyramidal motor disorders, for the treatment of side effects arising in the treatment of extrapyramidal motor disorders with conventional anti-Parkinson's medicaments and of extrapyramidal symptoms (EPS), tension states, side effects of hypertonia treatment induced by neuroleptics (for example with α-methyldopa) or for the prophylaxis, treatment and control of cerebral infarctions (apoplexia cerebri), such as strokes and cerebral ischaemia, or for the treatment of pain, in particular chronic pain, migraine, CNS trauma, hypoglycaemia, asthma, glaucoma, cytomegaly and for the treatment of other degenerative retinal diseases, incontinence, tinnitus, or for the treatment of loss of hearing induced by aminoglycoside antibiotics.

14. Set (kit) consisting of separate packs of
    a) an effective amount of a compound according to one of Claims 1 to 3 and/or physiologically acceptable salts, derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios, and
    b) an effective amount of a further medicament active ingredient.